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EXAMINER

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2109

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/665,359

Applicant(s)

HEYMANS ET AL.

Examiner

William J. Goodchild

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/30/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Page 19, paragraph 0059, line 3, the phrase "Also, as used herein, the article "a" is intended to include one or more items." "A" has a well known meaning as singular, considering "a" to be plural would go against the generally accepted definition.

Appropriate correction is required.

Claim Objections

2. Claims 18, 19-21, 24-29, 31-32, 35-44 and 47 are objected to because of the following informalities:

Claim 18, line 2, the phrase "users" has been defined in claim 14, line 3, it is suggested to change the phrase to --the users--, in order to improve the clarity of the claim language.

Claim 19, line 2, the phrase "users" has been defined in claim 14, line 3, it is suggested to change the phrase to --the users--, in order to improve the clarity of the claim language.

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Claim 24, line 1, the phrase "a cluster analysis" has been defined in claim 17, line 3, it is suggested to change the phrase to --the cluster analysis--, in order to improve the clarity of the claim language.

Claim 24, line 3, the phrase "the location information" has not been defined in the claim. It is suggested to change the phrase to --location information--, as this limitation has not been previously recited in the claim.

Claim 25, line 3, the phrase "the one or more clusters" has not been defined in the claim. It is suggested to change the phrase to --one or more clusters--, as this limitation has not been previously recited in the claim.

Claim 27, line 1, the phrase "a cluster analysis" has been defined in claim 17, line 3, it is suggested to change the phrase to --the cluster analysis--, in order to improve the clarity of the claim language.

Claim 27, line 3, the phrase "the location information" has not been defined in the claim. It is suggested to change the phrase to --location information--, as this limitation has not been previously recited in the claim.

Claim 29, line 2, the phrase "the cluster analysis" has not been defined in the claim. It is suggested to change the phrase to --a cluster analysis--, as this limitation has not been previously recited in the claim.

Claim 31, line 3, the end of the claim ends with a double period.

Claim 35, line 1, the phrase "the probability" has not been defined in the claim. It is suggested to change the phrase to --a probability--, as this limitation has not been previously recited in the claim.

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Claim 40, line 2, the phrase "location data points" has been defined in claim 38, line 5, it is suggested to change the phrase to --the location data points--, in order to improve the clarity of the claim language.

Claim 40, line 4, the phrase "the network address" has not been defined in the claim. It is suggested to change the phrase to --a network address--, as this limitation has not been previously recited in the claim.

Claim 41, line 2, the phrase "location data points" has been defined in claim 38, line 5, it is suggested to change the phrase to --the location data points--, in order to improve the clarity of the claim language.

Claim 42, line 1, the phrase "a cluster analysis" has been defined in claim 38, line 6, it is suggested to change the phrase to --the cluster analysis--, in order to improve the clarity of the claim language.

Claim 43, line 1, the phrase "a cluster analysis" has been defined in claim 38, line 6, it is suggested to change the phrase to --the cluster analysis--, in order to improve the clarity of the claim language.

Claim 47, line 8, the phrase "the web resource" has not been defined in the claim. It is suggested to change the phrase to --a web resource--, as this limitation has not been previously recited in the claim.

Any claim not specifically addressed above, is being objected to as incorporating the deficiencies of a claim upon which it depends.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claims 1, 6, 14, 30, 35, 45 and 47 are drawn towards a method/system comprising: determining, performing, collecting, analyzing, and acquiring. In order for a method/system claim to be statutory, it must result in useful, concrete and tangible results. In this instance there is no result of the method/system claimed; determining, performing, collecting, analyzing, and acquiring do not result in any real world change as it does not create a tangible result specifying what is being done or where it is being accomplished, such as "viewed on the client computer system" or "stored on the first users computer system".

Claims 2-5, 7-13, 31-34, 36-44 and 46, which are dependent on claims 1, 6, 14, 30, 35 and 45, do not add any tangible results to the claims and thus are rejected for the same reasons.

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In addition, claims 30 and 47 can be considered to be software in accordance with applicants specification, (page 19, lines 2-3). In order for a claim to be statutory, it must fall within a process, machine, manufacture, or a composition of matter. Software does not fall within a statutory category since it is not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

Claims 31-34, which are dependent on claim 30, do not add any tangible results to the claims and thus are rejected for the same reasons.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-47 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-33 of co-pending application no. 10/664,929. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and use the same limitations.

Claims 1-33 of reference 10/664,929, recite all the elements of claims 1-47 of the instant applications 10/665,359. The scope of 10/665,359 as recited in the claims 1-33 is a method for clustering by address, comprising of receiving a search query, obtaining geographical identifiers, identifying documents associated with the address located within the area of interest, determining if the result matches one or more keywords as relevant documents, and grouping the relevant documents into a cluster. The scope of 10/665,359 as recited in the claims 1-47 is a method of associating a resource with a geographical location to which the resource relates where the method determines the location information associated with the users that access the resources, performing a cluster analysis based on the location information, collecting location information, determining a plurality of locations associated with the users that access the resource, and analyzing the determined location to determine geographical relevance. The difference between the inventions is that the instant application 10/665,359 is a method of associating a resource with a geographical location using a method of clustering by address and application no. 10/664,929 is a method for clustering by address. A person

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of ordinary skill in the art would conclude that the invention defined in claims 1-47 of the instant application no. 10/665,359 are an obvious variation of the invention defined in application 10/664,929 and the claims 1-33.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20, line 1, recites the limitation "the applications". There is insufficient antecedent basis for this limitation in the claim. Claim 19, line 2 does recite the phrase "an application running locally to the users", application is singular and becomes plural in claim 20, line1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 6-11, 14-16, 19-21, 28-29, 35, 37-39, 42-45 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Houri (US Patent No. 6,665,715).

In reference to claim 1, Houri teaches a method comprising:

determining location information associated with users that access the resource, (column 1, lines 56-60 and column 2, lines 3-7, 34-40, the location tracking system includes a tracing engine module that is configured to send a route identification command to all the end-users who are currently on-line); and

performing a cluster analysis based on the location information, (column 2, lines 34-40 and column 11, lines 17-30, statistical analysis is applied to estimate geographic location of the host).

In reference to claim 2, Houri teaches the method of claim 1 wherein:

the resource is a web advertisement, (column 13, lines 6-14 and 59-65).

In reference to claim 3, Houri teaches the method of claim 1 wherein:

the resource is a web site, (column 13, lines 6-14 and 59-65).

In reference to claim 4, Houri teaches the method of claim 1 wherein:

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the location information includes network addresses, (column 13, lines 33-40, column 3, lines 27-31).

In reference to claim 6, Houri teaches a method comprising:

collecting location information associated with first users that access a resource, (column 7, lines 14-16);

performing an analysis on the collected location information to determine the geographic relevance of the resource, (column 7, lines 28-42);

determining second location information associated with a second user, (column 7, lines 14-16, 21-22), (a tracking system looks at 'each' IP address, which may have numerous connections to end users); and

determining whether to provide a document associated with the resource to the second user based, at least in part, on a matching of the geographic relevance of the resource to the second location information, (column 13, lines 6-14 and 59-65, location tracking system will track users based on predefined criteria to provide targeted ads or other location based information).

In reference to claim 7, Houri teaches the method of claim 6 wherein:

the collecting location information further comprises collecting location information from multiple first users, (column 7, lines 14-15), and

wherein performing an analysis further comprises performing a cluster analysis, (column 7, lines 28-42).

In reference to claim 8, Houri teaches the method of claim 6 wherein:

the resource is a web document, (column 13, lines 6-14).

In reference to claim 9, Houri teaches the method of claim 8 wherein:

the document associated with the resource is an advertisement, (column 13, lines 28-37, 59-64).

In reference to claim 10, Houri teaches the method of claim 6 wherein:

the document associated with the resource is the same as the resource, (column 13, lines 6-14 and column 1, lines 49-53).

In reference to claim 11, Houri teaches the method of claim 6 wherein:

the location information includes network addresses of the first users, (column 7, 14-16).

In reference to claim 14, Houri teaches a method comprising:

determining a plurality of locations associated with users that access the resource, (column 1, lines 56-60, column 2, lines 3-7); and

analyzing the determined locations to determine geographical relevance, (column 2, lines 34-40, column 11, lines 17-30).

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In reference to claim 15, Houri teaches the method of claim 14 wherein:
the resource is a web advertisement, (column 13, lines 28-37, 59-64).

In reference to claim 16, Houri teaches the method of claim 14 wherein:
the plurality of locations are network addresses of the users, (column 13, lines
33-40).

In reference to claim 19, Houri teaches the method of claim 14 wherein:
determining the plurality of locations associated with users includes collecting
location information using an application running locally to the users, (column 11, lines
40-43).

In reference to claim 20, Houri teaches the method of claim 19 wherein:
the applications include at least one of a browser tool bar, a browser plug-in, and
a browser, (column 11, lines 40-43, column 13, lines 4-14 and 33-40).

In reference to claim 21, Houri teaches the method of claim 19 wherein:
the location information includes at least one of IP addresses of the users and
network addresses of resources accessed by the users, (column 13, lines 28-33,
column 3, lines 27-31, column 7, lines 14-19).

In reference to claim 28, Houri teaches the method of claim 16 wherein:

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the plurality of network addresses are Internet Protocol (IP) addresses, (column 13, lines 33-40).

In reference to claim 29, Houri teaches the method of claim 28 wherein:

dynamic IP addresses are given less weight in the cluster analysis than static IP address, (column 2, lines 34-40, statistical analysis of which cluster analysis is a part of, it is inherent to weight the data within the formula).

In reference to claim 35, Houri teaches a method comprising:

determining a geographic location associated with the user, (column 1, lines 56-60, column 2, lines 3-7);

acquiring geographic relevance information for the network resource, (column 7, lines 28-42),

the geographic relevance information including information that defines at least one cluster associated with the network resource (column 7, lines 28-42),

the information defining the at least one cluster including at least a center point of the cluster and a measure of dispersion of the cluster, (column 7, line 59 – column 8, line 4); and

determining the probability that the user is geographically relevant to the network resource based on a statistical model applied to the at least one cluster, (column 7, line 59 – column 8, line 4).

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In reference to claim 37, Houri teaches the method of claim 35 wherein:

the statistical model is based on a Gaussian model, (column 7, lines 55-58, the process of step 58 is repeated for each level of information (filtering of the information), until the percentage threshold is satisfied).

In reference to claim 38, Houri teaches the method of claim 35 wherein:

gathering a plurality of network addresses of users that access the network resource, (column 1, lines 56-60, column 2, lines 3-7, column 7, lines 14-15);

mapping the plurality of network addresses to location data points, (column 7, lines 28-42); and

performing a cluster analysis on the location data points to generate the geographic relevance information, (column 7, lines 28-42).

In reference to claim 39, Houri teaches the method of claim 35 wherein:

the determination of geographic relevance of the user is based on web access patterns of the user, (column 1, lines 56-60, column 2, lines 3-7).

In reference to claim 42, Houri teaches the method of claim 38 wherein:

performing a cluster analysis further includes: determining whether the location data points tend to form one or more clusters, (column 2, lines 3-14).

In reference to claim 43, Houri teaches the method of claim 42 wherein:

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performing a cluster analysis further includes: associating geographic location information with the network resource based on the one or more clusters, (column 2, lines 34-40).

In reference to claim 44, Houri teaches the method of claim 38 wherein:
the plurality of network addresses are Internet Protocol (IP) addresses, (column 2, lines 34-40, column 1, lines 55-60 and column 3, lines 27-31).

In reference to claim 45, Houri teaches a method comprising:
gather a plurality of network addresses of users that access the network resource, (column 1, lines 56-60, column 2, lines 3-7);

map the plurality of network addresses to data points that correspond to geographic locations, (column 1, lines 49-53);

perform a cluster analysis on the data points, (column 2, lines 34-40, column 11, lines 17-30); and

determine a geographic location for the network resource based on the cluster analysis, (column 1, lines 56-60, column 2, lines 3-7).

In reference to claim 47, Houri teaches a method comprising:
means for gathering a plurality of network addresses of users that access the network resource, (column 7, lines 14-26);

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means for mapping the plurality of network addresses to data points that correspond to geographic locations, (column 7, lines 14-26); and

means for analyzing the plurality of data points to determine a geographic relevance of the web resource, (column 7, lines 27-42).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5, 12-13, 17-18, 22-27, 30-34, 36, 40-41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houri (US Patent No. 6,665,715), as applies to claims 1, 6, 30, 35 and 45 and further in view of Shultz et al. (US Publication No. 2003/0061211).

In reference to claim 5, Houri explicitly teaches the limitations of claim 5 as disclosed above except for the limitation of:

mapping the network addresses to geographical coordinate information, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls

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within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 5.

In reference to claim 12, Houri explicitly teaches the limitations of claim 12 as disclosed above except for the limitation of:

mapping the network addresses to two-dimensional coordinate information, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 12.

In reference to claim 13, Houri teaches the method of claim 6 wherein:

collecting the location information associated with the first users includes location information stored in cookies, (Houri, column 5, lines 63-66, a cookie is a file used to store information, Houri explains a database storing location information),

location information derived from browsing patterns, (Houri, column 7, lines 15-19).

Houri explicitly teaches the limitations of claim 13 as disclosed above except for the limitation of:

collecting location information derived from search terms entered by the user, in order to provide geographically targeted web page content.

The general concept of collecting location information based on terms in a search query, is well known within the art as illustrated by Shultz which discloses the use of a general information query and filtering the results to those located near the end user, (Shultz, paragraphs 0045, lines 2-4, 0046, lines 5-7 and 0048, lines 1-6, paragraph 0049, lines 1-5, using search terms entered by a user, which may include location data or general information which can be filtered to obtain location information), and falls within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location, (Shultz, paragraph 0017, lines 5-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of using a general information query and filtering the results to a location near the end user as taught by Shultz in order to make use of the

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well known concept of collecting location information based on terms in a search query to improve ways to target end users by geographical location as stated in claim 13.

In reference to claim 17 and 22-27 Houri teaches the method as disclosed in claim 16,

wherein claim 17 further comprises:

analyzing the determined locations includes performing a cluster analysis based on the two-dimensional coordinate information, (Houri, column 2, lines 34-40 and column 11, lines 17-30, statistical analysis is applied to estimate geographic location of the host);

wherein claim 23 further comprises:

mapping the network addresses to cities that are estimated to be closest to physical locations associated with the network addresses, (Houri, column 7, lines 52-55).

wherein claim 24 further comprises:

determining whether the location information tends to form one or more clusters, (Houri, column 7, lines 28-42, the location tracking system will use statistical analysis to determine geographical location information, using numerous IP addresses and then determine the percentage from the same geographic location).

wherein claim 25 further comprises:

associating geographic location information with the resource based on the one or more clusters, (column 2, lines 34-40).

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wherein claim 26 further comprises:

determining a probability that a location associated with a particular user is within the geographic location associated with the web resource based on a statistical model applied to the one or more clusters, (Houri, column 7, lines 28-51, the location system employ's a statistical analysis to determine the geographical location of a server node based on the number of end users and their geographical locations connected to the server).

wherein claim 27 further comprises:

normalizing the location information based on populations associated with locations in the location information, (Houri, column 7, line 59 – column 8, line 4, based on the number of users, the data may relate to a city, state, country etc.).

Houri explicitly teaches the limitations of claim 17, as disclosed above except for the limitation of:

mapping the plurality of network addresses to two-dimensional coordinate information, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 17.

Houri explicitly teaches the limitations of claim 22, as disclosed above except for the limitation of:

associating the network addresses with a two-dimensional point defined by latitude and longitude values estimated from the network addresses, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 22.

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Houri explicitly teaches the limitations of claim 23, as disclosed above except for the limitations of:

mapping the cities to a two-dimensional point defined by latitude and longitude values, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 23.

In reference to claim 18, Houri teaches the method as disclosed in claim 14, wherein claim 18 further comprises:

determining the plurality of locations associated with users includes;
using location information stored in cookies, (Houri, column 5, line 63 – column 6, line 4, a cookie is a file used to store information, Houri explains a database storing location information),

using browsing patterns of the users, (Houri, column 7, lines 15-19).

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Houri explicitly teaches the limitations of claim 18, as disclosed above except for the limitations of:

- determining the plurality of locations associated with users includes;
- using account information of the users, in order to provide geographically targeted web page content,
- using search terms entered by the user, in order to provide geographically targeted web page content.

The general concept of determining a location based on account information, is well known within the art as illustrated by Shultz which discloses the use of registration data, (Shultz, paragraph 0021, lines 3-5), and falls within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location, (Shultz, paragraph 0017, lines 5-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houru to include the use of registration data as taught by Shultz in order to make use of the well known concept of determining a location based on account information, based on user registration data in order to target the end user with location based web data as stated in claim 18.

The general concept of collecting location information based on terms in a search query, is well known within the art as illustrated by Shultz which discloses the use of a general information query and filtering the results to those located near the end user,

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(Shultz, paragraphs 0045, lines 2-4, 0046, lines 5-7 and 0048, lines 1-6, paragraph 0049, lines 1-5, using search terms entered by a user, which may include location data or general information which can be filtered to obtain location information), and falls within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location, (Shultz, paragraph 0017, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of using a general information query and filtering the results to a location near the end user as taught by Shultz in order to make use of the well known concept of collecting location information based on terms in a search query to improve ways to target end users by geographical location as stated in claim 18.

In reference to claims 30-34, Houri explicitly teaches the system as disclosed in claim 30, wherein:

a geographic relevance component configured to generate the geographic relevance information associated with the documents in the set of documents by gathering a plurality of network addresses of users that access the documents in the set of documents, (Houri, column 1, lines 56-60 and column 2, lines 3-7, 34-40, the location tracking system includes a tracing engine module that is configured to send a route identification command to all the end-users who are currently on-line),

mapping the plurality of network addresses to location data points, (Houri, column 13, lines 33-40, column 3, lines 27-31), and

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performing a cluster analysis on the location data points, (Houri, column 2, lines 34-40 and column 11, lines 17-30, statistical analysis is applied to estimate geographic location of the host).

wherein claim 31 further comprises:

the geographic relevance component performs the cluster analysis on the location data points based on a determination of whether the location data points tend to form one or more clusters, (Houri, column 7, lines 28-42).

wherein claim 32 further comprises:

the geographic relevance component additionally determines a probability that a location associated with a user that submitted the search query is geographically relevant to the documents in the set of documents based on a statistical model applied to the one or more clusters, (Houri, column 7, lines 28-51, the location system employs a statistical analysis to determine the geographical location of a server node based on the number of end users and their geographical locations connected to the server).

wherein claim 33 further comprises:

when performing the cluster analysis on the location data points, the geographic relevance component is further configured to normalize the location data points, (Houri, column 7, line 59 – column 8, line 4).

wherein claim 34 further comprises:

the normalizing is based at least in part on population associated with the location data points, (Houri, column 7, line 59 – column 8, line 4).

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Houri explicitly teaches the limitations of claim 30 as disclosed above except for the limitations of:

a document selector component configured to locate a set of documents relevant to a search query,

the document selector component basing the determination of relevancy at least in part on geographic relevance information associated with documents in the set of documents.

The general concept of a search engine, is well known within the art as illustrated by Shultz which discloses the use of a search engine, (Shultz, paragraph 0046, lines 1-2), and falls within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of using a search engine as taught by Shultz in order to make use of the well known concept of a search engine to locate geographical relevant information (Shultz, paragraph 0017, lines 5-9) as stated in claim 30.

The general concept of providing geographical relevant information, is well known within the art as illustrated by Shultz which discloses the use of determining corresponding unified geocodes, and / or other matching geographic reference information correlating to the search criteria, (Shultz, paragraphs 0046, lines 1-7 and 0048, lines 1-6, paragraph 0051, lines 1-9, correlating the search terms and the location data), and falls

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within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of determining corresponding unified geocodes, and / or other matching geographic reference information correlating to the search criteria as taught by Shultz in order to make use of the well known concept of providing and correlating geographical relevant information from a search query (Shultz, paragraph 0051, lines 6-9) as stated in claim 30.

In reference to claim 36, Houri explicitly teaches the limitations of claim 36 as disclosed above except for the limitations of:

the determination of geographic location associated with the user is based on terms in the search query.

The general concept of collecting location information based on terms in a search query, is well known within the art as illustrated by Shultz which discloses the use of a general information query and filtering the results to those located near the end user, (Shultz, paragraphs 0045, lines 2-4, 0046, lines 5-7 and 0048, lines 1-6, paragraph 0049, lines 1-5, using search terms entered by a user, which may include location data or general information which can be filtered to obtain location information), and falls within the realm of common knowledge as obvious design optimization to improve ways to target end users by geographical location, (Shultz, paragraph 0017, lines 5-9).

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It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of using a general information query and filtering the results to a location near the end user as taught by Shultz in order to make use of the well known concept of collecting location information based on terms in a search query to improve ways to target end users by geographical location as stated in claim 36.

In reference to claim 40, Houri explicitly teaches the limitations of claim 40 as disclosed above except for the limitation of:

associating the network addresses with two-dimensional points defined by latitude and longitude values estimated from the network address, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 40.

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In reference to claim 41, Houri teaches the method as disclosed in claim 38, wherein claim 41 further comprises:

mapping the network addresses to cities that are estimated to be close to physical locations associated with the network addresses, (Houri, column 7, lines 52-58);

Houri explicitly teaches the limitations of claim 41 as disclosed above except for the limitations of:

mapping the cities to two-dimensional points defined by latitude and longitude values, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 41.

In reference to claim 46, Houri explicitly teaches the limitations of claim 46 as disclosed above except for the limitations of:

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the data points are each defined by latitude and longitude values, in order to provide geographically targeted web page content.

The general concept of providing geographically targeted web page content, is well known within the art as illustrated by Shultz which discloses the use of using latitude and longitude coordinates to map a location, (Shultz, paragraph 0049, line 11), and falls within the realm of common knowledge as obvious design optimization to define a geographic area for targeted web page content.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Houri to include the use of latitude and longitude coordinates as taught by Shultz in order to make use of the well known concept of providing geographically targeted web page content, (Shultz, paragraph 0017, lines 5-9, identifying the at least one search result corresponding to a specified geographic area) as stated in claim 46.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Goodchild whose telephone number is (571) 270-1589. The examiner can normally be reached on Monday - Friday / 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on (571) 272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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William J Goodchild
Examiner
Art Unit 2109

WJG
04/23/2007

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over the printed name and title of the Supervisory Patent Examiner.